

REMARKS

The Examiner has rejected claims 7, 8, 10, 18, and 20–31. Claims 1–6, 9, and 11–17 were previously canceled. Claims 7, 10, 20, 22, and 24 have been amended to further recite the features of the invention; the scope of claims 7, 10, 20, 22, and 24 remain unchanged. As a result, claims 7, 8, 10, 18, and 20–31 are pending for examination with claims 7 and 20 being independent claims. The amendments made find support in the specification and do not constitute new matter.

Rejections Under 35 U.S.C. §102(b)

The Examiner has rejected claims 7–8, 10, 18, 20–24, and 28–31 under 35 U.S.C. §102(b) as being anticipated by Dolev (US 5,029,159) (“Dolev”).

Applicants have amended independent claim 7 to call for:

“...multicasting age information particular to the first redundant component to all other components in the plurality of redundant components,...” (underlining added for emphasis)

Applicants have amended independent claim 20 to call for:

“...multicasting currently-active leader election criteria information among all the plurality of redundant components;...” (underlining added for emphasis)

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Applicants have also amended dependent claims 10, 22, and 24 for proper antecedent basis with the amended claims on which they depend.

As such, Applicants submit that independent claims 7 and 20 are not anticipated by Dolev under 35 U.S.C. §102(b).

At least with respect to method 900, an example of the claimed methods, the present specification provides:

“Redundant nodes can be the redundant daemon instances, as well as redundant software programs, redundant software processes, redundant software objects, or other redundant software components. The redundant nodes can also be hardware nodes, such as redundant servers, redundant clients, redundant devices, and other redundant hardware nodes.” (pg. 22, lines 3–7; underlining added for emphasis)

“For a number of instances of the same daemon, a leader daemon instance must be determined. The leader daemon instance is the active instance, which responds to requests to the daemon. The other instances do not respond. If the leader instance fails, then another instance becomes the new leader instance. ... Requests made to the daemon are multicast to all instances of the daemon, but only the leader instance responds.” (pg. 21, portions lines 13–23; underlining added for emphasis)

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“...weak leader election reduces the coordination needed among the nodes, as well as the coordination needed between the clients and the nodes. This reduction is accomplished by having the clients contact all the nodes, such as by multicasting requests to all nodes.” (pg. 22, line 21–pg. 23, line 1; underlining added for emphasis)

Dolev, on the other hand, provides:

This invention particularly relates to a method and means for responding to loss of a token in a token ring network by choosing a leader terminal having the responsibility for regenerating the token and placing it on the transmission network. ... Token ring systems are well understood in the art, and involve the use of a looped, uni-directional transmission system which connects a plurality of terminals for data exchange. ... The system is looped in that each send unit unidirectionally transmits over a respective link to the receive unit of one adjacent terminal. The receive unit's terminal has provision for providing the received information to the terminal's send unit so that the information is forwarded to the next adjacent terminal, and so on, until the information is eventually propagated around the ring, back to the receive unit of the originating terminal.” (Dolev, col. 1, portions lines 17–33; underlining added for emphasis)

The invention is practiced in a token ring system for interconnecting a plurality of terminals and concerns a method for

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leadership selection. The method of the invention involves, first, at a first terminal in the system, identifying an event which initiates the procedure, and then generating and transmitting in the token ring system a succession of signals to select a system leader. Each of these signals in the succession has a terminal identification characteristic which identifies a respective one of the system terminals. The succession of signals is received at the first terminal and the following sequence is performed in response to identification of the starting event: (a) leadership selection reference signal is stored; (b) a signal from the succession of signals is received; (c) the terminal identification characteristic of the received signal is compared with the leadership selection reference signal; (d) if the terminal identification characteristic of the received signal matches the leadership selection reference signal, a token is generated at the first terminal and circulated in the system;" (Dolev, col. 3, lines 9-31; underlining added for emphasis)

Thus Dolev does not teach or suggest transmitting information via "multicasting".

Further, Applicants have amended independent claim 7 to call for:

"...multicasting age information... receiving age information... comparing the age information..." (underlining added for emphasis)

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Applicants have amended dependent claim 10 to call for:

"the age information includes a duration of time on-line" (underlining added for emphasis)

Applicants have amended independent claim 20 to call for:

"wherein the currently-active leader election criteria information includes age information" (underlining added for emphasis)

Applicants have amended dependent claim 22 to call for:

"the age information includes a duration of time on-line" (underlining added for emphasis)

As such, Applicants submit that independent claims 7 and 20, and dependent claims 10 and 22, are not anticipated by Dolev under 35 U.S.C. §102(b).

The present specification provides:

"In the weak leader election approach, the redundant nodes of a distributed system exchange information particular to them. For example, the information can be age information." (pg. 3, lines 19–21; underlining added for emphasis)

"The age information can include, for example, how long each instance has been online." (pg. 22, lines 8–9; underlining added for emphasis)

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Dolev, on the other hand, provides:

"Following the transport control field is an identification field ID in which destination and originating addresses are placed. For the purposes of this invention, a terminal's address is considered to be equivalent to its identification, and the numerical representation of the address is the terminal's identification code." (Dolev, col. 5, lines 12–15; underlining added for emphasis)

Thus Dolev does not teach or suggest using "age information" including a "duration of time on-line" but, instead, teaches using a "terminal's address" as its "identification code".

Accordingly, Applicants submit that independent claims 7 and 20 are not anticipated by Dolev under 35 U.S.C. §102(b). As such, Applicants respectfully request that the Examiner withdraw the rejection.

Claims 8, 10, 18, and 21–31 are dependent on claim 7 or 20. As such, claims 8, 10, 18, and 21–31 are believed allowable, at least in part, based upon claim 7 or 20.

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Rejections Under 35 U.S.C. §103(a)

The Examiner has rejected claims 25–27 under 35 U.S.C. §103(a) as being unpatentable over Dolev in view of Badovinatz et al. (US 5,699,501) (“Badovinatz”).

Claims 25–27 are dependent on claim 20. As such, claims 25–27 are believed allowable, at least in part, based upon claim 20.

Accordingly, reconsideration and examination of the above-referenced application is requested.

CONCLUSION

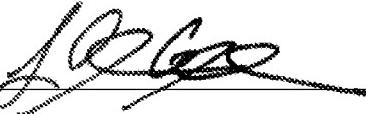
Accordingly, in view of the above amendment and remarks it is submitted that the claims are patentably distinct over the prior art and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above application is requested. Based on the foregoing, Applicants respectfully request that the pending claims be allowed, and that a timely Notice of Allowance be issued in this case. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants’ representative at the telephone number listed below.

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If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check please charge any deficiency to Deposit Account No. 50-0463.

Respectfully submitted,
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Noemi Tovar
Printed Name

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